

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:**Siegenthaler, Peter**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-023589**Date Inspected:** 12-May-2011**Project Name:** SAS Superstructure**OSM Arrival Time:** 1900**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 700**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

CWI Name:	N/A	CWI Present:	Yes	No			
Inspected CWI report:	Yes	No	N/A	Rod Oven in Use:	Yes	No	N/A
Electrode to specification:	Yes	No	N/A	Weld Procedures Followed:	Yes	No	N/A
Qualified Welders:	Yes	No	N/A	Verified Joint Fit-up:	Yes	No	N/A
Approved Drawings:	Yes	No	N/A	Approved WPS:	Yes	No	N/A
				Delayed / Cancelled:	Yes	No	N/A

Bridge No: 34-0006**Component:** OBG and Tower**Summary of Items Observed:**

On this date CALTRANS OSM Quality Assurance (QA) Inspector, Mr. Paul Dawson, arrived on site at the Zhenhua Port Machinery Company (ZPMC) facility at Changxing Island, in Shanghai China, for the purpose of monitoring welding and fabrication of the San Francisco / Oakland Bay Bridge (SFOBB) components. This QA Inspector observed the following:

Paint Workshop #1 & #2 and ZPMC ship #18

At around 1900 hours this QA Inspector was informed that various items were ready for in process and final coatings / paint inspections in painting / blast shops #1, #2 and ZPMC ship #18.

The following coatings notifications were presented:

#T2179, location: Paint shop #1: "Splice for façade" 58 pieces , item #2: Tower splices (re-blasted) 4 pieces, and item #3: "Tower shim plate (re-blasted) 1 piece"; Final VT and dry film thickness (DFT) measurements. This QA Inspector observed ABF performing visual and DFT measurements. This QA Inspector performed random visual inspections of the finished coatings and ABF coating inspector Mr. Weicheng Yun (Wei) performing random DFT measurements. Items observed on this date appeared to generally comply with applicable contract documents.

#T2180, location: Paint shop #2: item #1: "Lift 6 Tower boom support" 2 pieces; Final VT and dry film thickness (DFT) measurements. This QA Inspector observed ABF performing visual and DFT measurements. This QA Inspector performed random visual inspections of the finished coatings and ABF coating inspector Mr. Weicheng

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Yun (Wei) performing random DFT measurements. Items observed on this date appeared to generally comply with applicable contract documents.

#T2181, location: Paint shop #2: item #1: "Tower boom base" 2 pieces; Final VT and dry film thickness (DFT) measurements. This QA Inspector observed ABF performing visual and DFT measurements and ABF rejected both items due to low DFT measurements. item #2: "Bent plate" 2 pieces and item #3: "I beam" 2 pieces; This QA Inspector observed ABF performing visual and DFT measurements. This QA Inspector performed random visual inspections of the finished coatings and ABF coating inspector Mr. Weicheng Yun (Wei) performing random DFT measurements. Items #2 & #3 appeared to generally comply with applicable contract documents.

#2182 and #2183, location: Ship#18: "Tower head external"; 4 pieces: surface preparation and final coating applications. This QA Inspector observed ZPMC preparing and applying coating materials to some of these areas and Mr. Weicheng Yun informed this QA Inspector he has rejected some of these areas. At around 0400 hours Mr. Weicheng Yun informed this QA Inspector he is preparing to reexamine the rejected areas and at 0430 Mr. Weicheng Yun said all areas are acceptable for painting.

#2184, location: Ship#18: "Skirt plate damaged area"; 6 pieces: surface preparation and final coating applications. ABF accepted SD1-A712, ND1-A501 and SD1-A440 and four others were visually rejected.

#2185 location: West of blast shops: "Façade Plate"; 29 pieces: surface degreasing and cleaning. This QA Inspector observed ABF performing visual inspections of these surfaces and this QA observed the surfaces appear to be free of oils and extraneous materials. These plates were then moved to the blast shop, see item #2187 below:

#2187 location: Blast shop #2: "Façade Plate"; 29 pieces: surface preparation and cleaning. This QA Inspector observed ABF performing visual inspections of these surfaces and localized areas were marked for grinding. ZPMC inspectors performed surface testing for salts. ZPMC workers used a grinder to remove oxides and other items where ABF and ZPMC inspectors had marked. Following this grinding items observed on this date appeared to generally comply with applicable contract documents.

#2188, location: Paint shop #2: "Tower boom base"; 2 pieces: Final VT and dry film thickness (DFT) measurements. This QA Inspector observed the finished paint has not fully cured and that the surfaces are tacky to the touch. ABF coating inspector Mr. Weicheng Yun (Wei) informed this QA Inspector that this item will be inspected at a later time, following curing of the paint. At around 0430 hours Mr. Weicheng Yun informed this QA Inspector the paint is now cured and these items are ready for visual and DFT inspections. This QA Inspector observed three areas with paint runs and ZPMC used sandpaper to blend these areas. Mr. Weicheng Yun (Wei) said additional touchup painting will be completed at a later time and he performing random DFT measurements of the dried coating. Items observed on this date appeared to generally comply with applicable contract documents.

#6642, location: Paint shop #2: "Switch Cabinet"; 1 piece: Final VT and dry film thickness (DFT) measurements. This QA Inspector observed ABF performing visual and DFT measurements. This QA Inspector performed random visual inspections of the finished coatings and ABF coating inspector Mr. Weicheng Yun (Wei) informed this QA Inspector that this item has zinc coating underneath the finished paint and that accurate DFT

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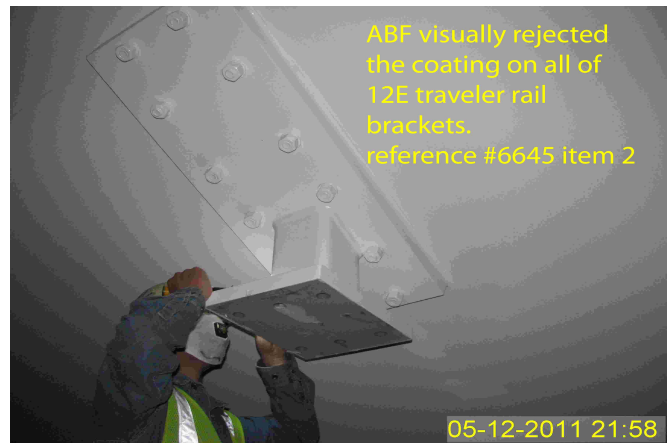
measurements cannot be obtained on these areas. Items observed on this date appeared to generally comply with applicable contract documents.

#6643, location: Paint shop #1: “Shim plates (re-blasted)”; 7 pieces: Final VT and dry film thickness (DFT) measurements. This QA Inspector observed ABF performing visual and DFT measurements. This QA Inspector performed random visual inspections of the finished coatings and ABF coating inspector Mr. Weicheng Yun (Wei) performing random DFT measurements. Items observed on this date appeared to generally comply with applicable contract documents.

#6644, location: Ship#18: item #1: “L12E and L12W deck edge” 10cm area, Item #2 “CB17 manhole cover plate”: surface preparation and final coating applications. This QA Inspector observed ZPMC preparing and applying coating materials to these areas.

#6645, location: Ship#18: item #1: “L12E external contact support area” 4 locations: Final VT and dry film thickness (DFT) measurements. This QA Inspector observed ABF performing visual and DFT measurements. This QA Inspector performed random visual inspections of the finished coatings and ABF coating inspector Mr. Weicheng Yun (Wei) performing random DFT measurements. item #2: “L12E external traveler rail brackets” various locations: Final VT and dry film thickness (DFT) measurements. This QA Inspector observed ABF performing visual and each of the traveler rail brackets were visually rejected by ABF inspectors. item #3: “L12E external corner unit” various locations: Final VT and dry film thickness (DFT) measurements. ABF rejected this inspection due to lack of access and insufficient light. Note: these areas are approximately 20 feet above the boat deck and there is not manlift, scaffolding or other safe access to allow inspection of these surfaces.

#6595, location: Ship#18: “Bikepath panel external contact support area”; 8 pieces: surface preparation and final coating applications. This QA Inspector observed ZPMC preparing and applying coating materials to these areas.



Summary of Conversations:

See Above.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact James Devey +8615000026784, who represents the Office of Structural Materials for your project.

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Inspected By:	Dawson,Paul	Quality Assurance Inspector
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Reviewed By:	Riley,Ken	QA Reviewer
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